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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ELHILO, EISA B

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 08/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/814,236

Applicant(s)

PLOS ET AL.

Examiner

Eisa B. Elhilo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-64 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 18-64 is/are rejected.
- 7) ☒ Claim(s) 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/26/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

- 1 This action is responsive to the amendment filed on June 26, 2006.
- 2 The rejections of the claims in the previous office action mailed on March 24, 2006, are withdrawn because of the applicant's amendment.

NEW GROUND OF REJECTION

Claim Rejections - 35 USC § 102

- 3 The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

- 4 The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 7-15, 18-20, 26-28, 32-34, 36-37, 39-44, 46-47, 49-50 and 52-64 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in alternative, under 103(a) as obvious over Rondeau et al. (US 6,001,135).

Rondeau et al. (US' 135) teaches a dyeing composition comprising a fluorescent of a formula (14), which is identical to the claimed formula (F4) as claimed in claims 1, 11 and 14-15 (see col. 11, formula 14) and plant gums (guar gum and xanthan gum) as non-associative thickening polymer as claimed in claims 1 and 2 (see col. 23, lines 25-30), wherein the

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fluorescent compound is presented in the composition in the amounts of 0.05 to 2% which within the claimed ranges as claimed in claims 18-20 (see col. 21, lines 30-31), wherein the composition also comprises para-phenylenediamine as an oxidation base in the amount of 0.001 to 5% by weight as claimed in claims 26-28 (see col. 21, lines 22-24), oxidizing agents of hydrogen peroxide and perborates as claimed in claims 32-34 (see col. 21, lines 14-18). Rondeau et al. (US' 135) also teaches a process for dyeing hair comprising applying to the hair the dyeing composition as described above and wherein the dyeing composition is applied to the hair after mixing with the oxidizing composition as claimed in claims 36-37, 39, 47, 49-50, 52, 55-59 and 61 (see col. 24, lines 32-39). Rondeau et al. (US' 135) further teaches and discloses a multi-compartment device for dyeing hair as claimed in claim 46 (see col. 23, lines 50-55). Rondeau et al. (US' 135) teaches the same dyeing ingredients of non-associative thickening polymer and a fluorescent dye identical to the fluorescent dye of the claimed formula (F4) in the claimed amounts, which inherently would have the same physical properties of reflectances, color properties (orange range) and solubility in specific medium as those claimed and wherein the dyeing composition also can be applied to the claimed type of hair with the claimed tones as claimed in claims 7-10, 12-13, 40-42, 52-54, 60 and 62-64. Rondeau et al. (US' 135) teaches all the limitations of the instant claims. Hence, Rondeau et al. (US' 135) anticipates the claims.

However, the claims in the alternative; under 35 U.S.C. 103(a) are obvious over Rondeau et al. (US' 135), because the reference teaches a hair dyeing composition comprising the same claimed dyeing ingredients of oxidation bases, fluorescent compound, non-associative thickening polymer and oxidizing agents as claimed, and, thus the chemical composition and its properties are inseparable. Therefore, if the prior art teaches the identical chemical structure, the properties

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applicant discloses and/or claims are necessarily present. (see *In re Spada*, 911 F. 2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990), and, thus, a person of the ordinary skill in the art would expect such a dyeing composition to have ingredients having similar physical properties as those claimed including reflectances, color properties and solubility as claimed and wherein the composition can be applied to skin or similar hair having similar tones as claimed. Absent unexpected results.

5 Claims 3-6, 29-31, 35, 38, 45, 48 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rondeau et al. (US 6,001,135) in view of Lang et al. (WO 99/36045). The US Patent No. 6,576,024 B1, is used in this rejection as English translation of the Patent WO 99/36045.

The disclosure of Rondeau et al. (US' 135) as described above, does not teach or disclose the specific species of the non-associative thickening polymers as claimed. Further, Rondeau et al. does not teach the claimed couplers and enzymes.

However, Rondeau et al. (US' 135) suggests the use of non-associative thickening polymers such as plant gums (guar gum and xanthan gum) in the composition (see col. 23, lines 25-30). Rondeau et al. (US' 135) also teaches and suggests the use of couplers in the dyeing composition (see col. 21, lines 60-65).

Lang et al. (US' 024 B1) in analogous art of hair dyeing formulation, teaches a composition comprising non-associative thickening polymers such as nonionic guar gums, scleroglucan gums (biopolysaccharide of microbial origin) derived from plant exudates such as gum Arabic and nonionic guar gums modified with C1-C6 hydroxyalkyl groups as claimed in claims 2-4, 38, 45, 48 and 51 (see col. 6, lines 62-64 and col. 7, lines 10-21) and wherein the

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thickening polymers are presented in the composition in the amounts of 0.01 to 10% and 0.1 to 5% as claimed in claims 5-6 (see col. 7, lines 26-30), wherein the composition further comprises laccase enzymes (see col. 2, line 18), couplers such as meta-phenylenediamines in the amounts of 0.0001 to 10% and 0.005 to 5% as claimed in claims 29-31 (see col. 13, lines 1-5 and lines 21-24).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of Rondeau et al. (US' 135) by incorporating non-associative thickening polymers and couplers as taught by Land et al. (US' 024 B1) to arrive at the claimed invention. Such a modification would be obvious because Rondeau et al. (US' 135) as a primary reference suggests the use of the non-associative thickening polymers such as plant gums (guar gum and xanthan gum) (see col. 23, lines 25-30) and couplers in the dyeing composition (see col. 21, lines 60-65). Lang et al. (US' 024 B1) as a secondary reference clearly teaches the claimed species biopolysaccharide gums of scleroglucan and gum Arabic, laccase enzymes and meta-phenylenediamine coupler, and, thus, a person of the ordinary skill in the art would be motivated to incorporate the claimed species biopolysaccharide gums of scleroglucan and gum Arabic, laccase enzyme as oxidizing agent and the claimed couplers as taught by Lang et al. in the dyeing composition of Rondeau et al. with a reasonable expectation of success for improving the performance of the dyeing composition and would expect such a composition to have similar properties to those claimed, absent unexpected results.

6 Claims 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rondeau et al. (US 6,001,135) in view of Vandebossche et al. (US 6,391,062 B1).

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The disclosure of Rondeau et al. (US' 135) as described above, does not teach or disclose the claimed species of the direct dyes.

However, Rondeau et al. (US' 135) suggests the use of other direct dyes in the keratin fiber formulation (see col. 22, lines 6-9).

Vandenbossche et al. (US' 062 B1) in other analogous art of keratin fibers dyeing formulation, teaches a dyeing composition comprising direct dyes such as nitrobenzene and anthraquinone dyes in the amounts of 0.5 to 10% which overlapped with the claimed ranges as claimed in claims 21-24 (see col. 7, lines 62-67 and col. 8, lines 1-3).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be motivated to modify the composition of Rondeau et al. (US' 135) by incorporating the direct dyes in the claimed amounts as taught by Vandenbossche et al. (US' 062 B1) to make such a composition. Such a modification would be obvious because the primary reference suggest the use of direct dyes in the dyeing composition (see col. 22, lines 6-9). Vandenbossche et al. (US' 062 B1) as a secondary reference clearly teaches and discloses direct dyes of the claimed species nitrobenzene and anthraquinone dyes to broaden the range of shades and to obtain varied shades (see col. 7, lines 59-65), and, thus, a person of the ordinary skill in the art would be motivated to incorporate the direct dyes as taught by Vandenbossche et al. (US' 062 B1) in the dyeing composition of Rondeau et al. (US' 135) with a reasonable expectation of success for obtaining varied shades and would expect such a composition to have similar properties to those claimed, absent unexpected results.

7 Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rondeau et al. (US 6,001,135) in view of Giuseppe et al. (US 5,744,127).

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The disclosure of Rondeau et al (US' 135) as described above, does not teach or disclose dyeing compositions in forms of dyeing shampoos as claimed.

However, Rondeau et al. (US' 135) clearly teaches that the dyeing composition can be in various forms such as in the form of liquids, creams or gel or in any other form which is appropriate for dyeing keratin fibers, and in particular hair (see col. 22, lines 44-48).

Giuseppe et al. (US' 127) in other analogous art of hair treating formulation, teaches compositions formulated as a hair shampoo and hair dyeing as well (see col. 6, lines 5-6).

Therefore, in view of the teaching of the secondary reference, one having ordinary skill in the art at the time the invention was made would be modified to formulate the dyeing composition of Rondeau et al. in a shampoo form as taught by Giuseppe et al. to arrive at the claimed composition. Such a modification would be obvious because Giuseppe et al. clearly teaches that the dyeing composition can be formulated in a shampoo form, and, thus, one having ordinary skill in the art would be motivated to formulate the dyeing composition in any form including the shampoo form, and would expect such a composition to have similar properties to those claimed, absent unexpected results.

Allowable Subject Matter

8 Claims 16-17 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior art of record do not teach or disclose a hair dyeing composition comprising fluorescent of the claimed formula (F3).

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9 Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eisa B. Elhilo whose telephone number is (571) 272-1315. The examiner can normally be reached on M - F (8:00 -4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "Eisa Elhilo". The signature is fluid and cursive, with the first name "Eisa" and last name "Elhilo" clearly distinguishable.

Eisa Elhilo
Primary Examiner
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August 20, 2006